

Electronic Filing System (EFS) Data  
Electronic Patent Application Submission  
USPTO Use Only

EFS ID: 13764  
Application ID: 09683677  
Title of Invention: METHOD OF SWITCHING  
EXTERNAL MODELS IN AN  
AUTOMATED SYSTEM-ON-CHIP  
INTEGRATED CIRCUIT DESIGN  
VERIFICATION SYSTEM  
First Named Inventor: Robert Devins  
Domestic/Foreign Application: Domestic Application  
Filing Date: null  
Effective Receipt Date: 2002-02-01  
Submission Type: Utility Patent Filing  
Filing Type: new-utility  
Confirmation Number: 0  
Attorney Docket Number: BUR920010098  
Digital Certificate Holder: cn=Richard M. Kotulak, ou=Registered Attorneys, ou=Patent and  
Trademark Office, ou=Department of Commerce, o=U.S.  
Government, c=US  
Certificate Message Digest: E/nOyRVHipI56MNVkinRVg==  
Total Fees Authorized: \$780.0  
Payment Category: DA - Deposit Account  
Deposit Account Number: 90456  
Deposit Account Name: Richard M. Kotulak



# TRANSMITTAL FORM

JC474 U.S. PTO  
09/683677  
02/01/02

Electronic Version 1.0.3

Stylesheet Version: 1.0

Submission Type: Utility  
Patent Filing

Attorney Docket  
Number:

BUR920010098

## METHOD OF SWITCHING EXTERNAL MODELS IN AN AUTOMATED SYSTEM- ON-CHIP INTEGRATED CIRCUIT DESIGN VERIFICATION SYSTEM

First Named Inventor: Robert Devins

### SUBMITTED BY

Name:	Richard M. Kotulak
Registration Number:	27712
Electronic Signature Mark: Richard M. Kotulak /s/	Date Signed: 20020201

*I certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.*

*I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.*

### Attached Files:

declaration

BUR920010098US1Dec1.tif

declaration	BUR920010098US1Dec2.tif
declaration	BUR920010098US1Dec3.tif
declaration	BUR920010098US1Dec4.tif
bibd-transmittal	BUR920010098US1apds.xml
patent-assignments	BUR920010098US1asgn.xml
specification	BUR920010098US1.xml
fee-transmittal	BUR920010098US1fee.xml

**Attached Image File(s):**

BUR920010098US1Dec1.tif  
BUR920010098US1Dec2.tif  
BUR920010098US1Dec3.tif  
BUR920010098US1Dec4.tif

09683677-000100

**Comments:**

Table 1	
Parameter	Value
Age (years)	25.0
Height (cm)	170.0
Weight (kg)	65.0
Body mass index (kg/m <sup>2</sup> )	22.0
Heart rate (b/min)	75.0
Stroke volume (L)	0.07
Cardiac output (L/min)	5.25
Mean arterial pressure (mmHg)	93.3
Systemic vascular resistance (dyne/cm <sup>2</sup> )	1600
Pulmonary artery pressure (mmHg)	16.0
Pulmonary capillary pressure (mmHg)	11.0
Left ventricular pressure (mmHg)	120.0
Right ventricular pressure (mmHg)	25.0
Left atrial pressure (mmHg)	10.0
Right atrial pressure (mmHg)	5.0
Left ventricular end-diastolic pressure (mmHg)	12.0
Right ventricular end-diastolic pressure (mmHg)	8.0
Left ventricular stroke volume (L)	0.07
Right ventricular stroke volume (L)	0.07
Stroke volume index (L/m <sup>2</sup> )	0.04
Cardiac output index (L/min/m <sup>2</sup> )	3.15
Mean arterial pressure index (mmHg/m <sup>2</sup> )	54.4
Systemic vascular resistance index (dyne/cm <sup>2</sup> /m <sup>2</sup> )	1600
Pulmonary artery pressure index (mmHg/m <sup>2</sup> )	9.4
Pulmonary capillary pressure index (mmHg/m <sup>2</sup> )	6.3
Left ventricular pressure index (mmHg/m <sup>2</sup> )	70.6
Right ventricular pressure index (mmHg/m <sup>2</sup> )	14.7
Left atrial pressure index (mmHg/m <sup>2</sup> )	5.9
Right atrial pressure index (mmHg/m <sup>2</sup> )	2.9
Left ventricular end-diastolic pressure index (mmHg/m <sup>2</sup> )	6.9
Right ventricular end-diastolic pressure index (mmHg/m <sup>2</sup> )	4.7
Left ventricular stroke volume index (L/m <sup>2</sup> )	0.04
Right ventricular stroke volume index (L/m <sup>2</sup> )	0.04
Stroke volume index (L/m <sup>2</sup> )	0.04
Cardiac output index (L/min/m <sup>2</sup> )	3.15
Mean arterial pressure index (mmHg/m <sup>2</sup> )	54.4
Systemic vascular resistance index (dyne/cm <sup>2</sup> /m <sup>2</sup> )	1600
Pulmonary artery pressure index (mmHg/m <sup>2</sup> )	9.4
Pulmonary capillary pressure index (mmHg/m <sup>2</sup> )	6.3
Left ventricular pressure index (mmHg/m <sup>2</sup> )	70.6
Right ventricular pressure index (mmHg/m <sup>2</sup> )	14.7
Left atrial pressure index (mmHg/m <sup>2</sup> )	5.9
Right atrial pressure index (mmHg/m <sup>2</sup> )	2.9
Left ventricular end-diastolic pressure index (mmHg/m <sup>2</sup> )	6.9
Right ventricular end-diastolic pressure index (mmHg/m <sup>2</sup> )	4.7
Left ventricular stroke volume index (L/m <sup>2</sup> )	0.04
Right ventricular stroke volume index (L/m <sup>2</sup> )	0.04
Stroke volume index (L/m <sup>2</sup> )	0.04
Cardiac output index (L/min/m <sup>2</sup> )	3.15
Mean arterial pressure index (mmHg/m <sup>2</sup> )	54.4
Systemic vascular resistance index (dyne/cm <sup>2</sup> /m <sup>2</sup> )	1600
Pulmonary artery pressure index (mmHg/m <sup>2</sup> )	9.4
Pulmonary capillary pressure index (mmHg/m <sup>2</sup> )	6.3
Left ventricular pressure index (mmHg/m <sup>2</sup> )	70.6
Right ventricular pressure index (mmHg/m <sup>2</sup> )	14.7
Left atrial pressure index (mmHg/m <sup>2</sup> )	5.9
Right atrial pressure index (mmHg/m <sup>2</sup> )	2.9
Left ventricular end-diastolic pressure index (mmHg/m <sup>2</sup> )	6.9
Right ventricular end-diastolic pressure index (mmHg/m <sup>2</sup> )	4.7
Left ventricular stroke volume index (L/m <sup>2</sup> )	0.04
Right ventricular stroke volume index (L/m <sup>2</sup> )	0.04
Stroke volume index (L/m <sup>2</sup> )	0.04
Cardiac output index (L/min/m <sup>2</sup> )	3.15
Mean arterial pressure index (mmHg/m <sup>2</sup> )	54.4
Systemic vascular resistance index (dyne/cm <sup>2</sup> /m <sup>2</sup> )	1600
Pulmonary artery pressure index (mmHg/m <sup>2</sup> )	9.4
Pulmonary capillary pressure index (mmHg/m <sup>2</sup> )	6.3
Left ventricular pressure index (mmHg/m <sup>2</sup> )	70.6
Right ventricular pressure index (mmHg/m <sup>2</sup> )	14.7
Left atrial pressure index (mmHg/m <sup>2</sup> )	5.9
Right atrial pressure index (mmHg/m <sup>2</sup> )	2.9
Left ventricular end-diastolic pressure index (mmHg/m <sup>2</sup> )	6.9
Right ventricular end-diastolic pressure index (mmHg/m <sup>2</sup> )	4.7
Left ventricular stroke volume index (L/m <sup>2</sup> )	0.04
Right ventricular stroke volume index (L/m <sup>2</sup> )	0.04
Stroke volume index (L/m <sup>2</sup> )	0.04
Cardiac output index (L/min/m <sup>2</sup> )	3.15
Mean arterial pressure index (mmHg/m <sup>2</sup> )	54.4
Systemic vascular resistance index (dyne/cm <sup>2</sup> /m <sup>2</sup> )	1600
Pulmonary artery pressure index (mmHg/m <sup>2</sup> )	9.4
Pulmonary capillary pressure index (mmHg/m <sup>2</sup> )	6.3
Left ventricular pressure index (mmHg/m <sup>2</sup> )	70.6
Right ventricular pressure index (mmHg/m <sup>2</sup> )	14.7
Left atrial pressure index (mmHg/m <sup>2</sup> )	5.9
Right atrial pressure index (mmHg/m <sup>2</sup> )	2.9
Left ventricular end-diastolic pressure index (mmHg/m <sup>2</sup> )	6.9
Right ventricular end-diastolic pressure index (mmHg/m <sup>2</sup> )	4.7
Left ventricular stroke volume index (L/m <sup>2</sup> )	0.04
Right ventricular stroke volume index (L/m <sup>2</sup> )	0.04
Stroke volume index (L/m <sup>2</sup> )	0.04
Cardiac output index (L/min/m <sup>2</sup> )	3.15
Mean arterial pressure index (mmHg/m <sup>2</sup> )	54.4
Systemic vascular resistance index (dyne/cm <sup>2</sup> /m <sup>2</sup> )	1600
Pulmonary artery pressure index (mmHg/m <sup>2</sup> )	9.4
Pulmonary capillary pressure index (mmHg/m <sup>2</sup> )	6.3
Left ventricular pressure index (mmHg/m <sup>2</sup> )	70.6
Right ventricular pressure index (mmHg/m <sup>2</sup> )	14.7
Left atrial pressure index (mmHg/m <sup>2</sup> )	5.9
Right atrial pressure index (mmHg/m <sup>2</sup> )	2.9
Left ventricular end-diastolic pressure index (mmHg/m <sup>2</sup> )	6.9
Right ventricular end-diastolic pressure index (mmHg/m <sup>2</sup> )	4.7
Left ventricular stroke volume index (L/m <sup>2</sup> )	0.04
Right ventricular stroke volume index (L/m <sup>2</sup> )	0.04
Stroke volume index (L/m <sup>2</sup> )	0.04
Cardiac output index (L/min/m <sup>2</sup> )	3.15
Mean arterial pressure index (mmHg/m <sup>2</sup> )	54.4
Systemic vascular resistance index (dyne/cm <sup>2</sup> /m <sup>2</sup> )	1600

Docket No.  
BUR920010098US1

## Declaration and Power of Attorney For Patent Application

### English Language Declaration

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled  
**METHOD OF SWITCHING EXTERNAL MODELS IN AN AUTOMATED SYSTEM-ON-CHIP  
INTEGRATED CIRCUIT DESIGN VERIFICATION SYSTEM**

the specification of which

(check one)

☒ is attached hereto.

☐ was filed on \_\_\_\_\_ as United States Application No. or PCT International  
Application Number \_\_\_\_\_  
and was amended on \_\_\_\_\_  
(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)			Priority Not Claimed
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<input type="checkbox"/>
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<input type="checkbox"/>
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<input type="checkbox"/>

I hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States provisional application(s) listed below:

_____	_____
(Application Serial No.)	(Filing Date)
_____	_____
(Application Serial No.)	(Filing Date)
_____	_____
(Application Serial No.)	(Filing Date)

I hereby claim the benefit under 35 U. S. C. Section 120 of any United States application(s), or Section 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. Section 112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, C. F. R., Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

_____	_____	_____
(Application Serial No.)	(Filing Date)	(Status)
		(patented, pending, abandoned)
_____	_____	_____
(Application Serial No.)	(Filing Date)	(Status)
		(patented, pending, abandoned)
_____	_____	_____
(Application Serial No.)	(Filing Date)	(Status)
		(patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. *(list name and registration number)*

Mark F. Chadurjian-30,739

Richard A. Henkler-39,220

Richard M. Kotulak-27,712

James M. Leas-34,372

William D. Sabo-27,465

Robert A. Walsh-26,516

Howard J. Walter, Jr.-24,832

Christopher A. Hughes-26,914

Stanley B. Green-24,351

John E. Hoel-26,279

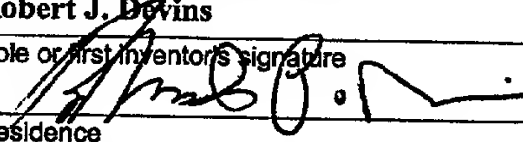
Joseph C. Redmond, Jr.-18,753

all attorneys and/or agents at Customer No. 30449

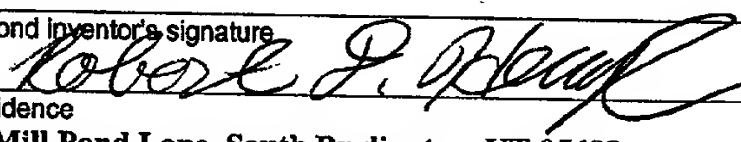
Send Correspondence to: Customer No. 30449

Direct Telephone Calls to: *(name and telephone number)*

Jack P. Friedman - (518) 220-1850

Full name of sole or first inventor	Robert J. Devins
Sole or first inventor's signature	
Residence	10 Creek Road, Essex Junction, VT 05452
Citizenship	USA
Post Office Address	Same as Residence

Date  
1/31/02

Full name of second inventor, if any	Robert D. Herzl
Second inventor's signature	
Residence	12 Mill Pond Lane, South Burlington, VT 05403
Citizenship	USA
Post Office Address	Same as Residence

Date  
1/31/02

Full name of third inventor, if any <b>David W. Milton</b>	
Third inventor's signature <i>David W. Milton</i>	Date <i>1-31-02</i>
Residence <b>12 Park Street, Underhill, VT 05489</b>	
Citizenship <b>USA</b>	
Post Office Address <b>Same as Residence</b>	

Full name of fourth inventor, if any	
Fourth inventor's signature	Date
Residence	
Citizenship	
Post Office Address	

Full name of fifth inventor, if any	
Fifth inventor's signature	Date
Residence	
Citizenship	
Post Office Address	

Full name of sixth inventor, if any	
Sixth inventor's signature	Date
Residence	
Citizenship	
Post Office Address	



# FEE TRANSMITTAL

Electronic Version 1.1.0

Stylesheet Version: 1.0

*Patent fees are subject to annual revisions on or about October 1st of each year.*

Large Entity

## TOTAL FEES AUTHORIZED: \$ 780

The commissioner is hereby authorized to charge indicated processing and/or publication fees and credit any overpayments to:

Deposit Account Number: 09-0456



Deposit Account Name: International Business Machines Corporation

Charge Any Additional Fee Required Under 37 C.F.R. Sections 1.16 and 1.17.

Charge Assignment Fees Required Under 37 C.F.R. Section 1.21 (h).

### SUBMITTED BY

Authorized Name: Richard M. Kotulak

Electronic Signature Mark: Richard M. Kotulak /s/

Date Signed: 20020131

### BASIC FILING FEE

Fee Description	Fee Code	Fee Paid
Utility Filing Fee	101	\$ 740

Subtotal For Basic Filing Fee: \$ 740

### EXTRA CLAIM FEES

	Fee Code	Fee	Extra Claims	Fee Paid
Total Claims: 20	103	\$ 18	0	\$ 0
Independent Claims: 3	102	\$ 84	0	\$ 0

Subtotal For Extra Claims Fees: \$ 0

ADDITIONAL FEES

Fee Description	Number	Quantity	Fee Code	Amount	Fee Paid
Recording Each Patent Assignment Per Property Fee	00000000	1	581	\$ 40	\$ 40

Subtotal For Additional Fees: \$ 40

09683677-00000000